

FIG. 1

10

```
M:= (XXT.XX)          N:= (XXT.YY)  
P:= M+OX                Q:= N+OY  
bigβ:= P-1.Q  
augX:= X  
augXn,4 := 0  
augXX := XX              newdels:=0  
augXXn,4 := 0  
bdel:=4..rows(β)          newdels:= if(rows(β)>3,βbdel,0)  
TREND:=(bigβ2)·60      non-scalar value  
TREND2:=[(bigβ4)·60]+TREND
```

FIG. 2

OD := READPRN(olddtx)
 OY := READPRN(olddtx)
 OX := READPRN(olddtx)

```

od:=0
od:= $\sum_{j=1}^{\text{rows}(OD)} OD_j$ 
XX1,1 := 1
XXn,1 := 1
YY1,1 := Y1,1 - od
YYn,1 := (Yn,1 - od) - if[(rows(Num_Del) > 1), if[(Compn,1,1) > (Nu

```

FIG. 3

$XX_{1,2} := \left(\frac{Comp_{1,11}}{60} \right) \cdot (-1)$

$XX_{n,2} := \left(\frac{Comp_{n,11}}{60} \right) \cdot (-1)$

$XX_{1,3} := \left(Comp_{1,12} \right) \cdot (-1)$

$XX_{n,3} := \left(Comp_{n,12} \right) \cdot (-1)$

$XX_{1,4} := X_{1,2}$

$XX_{n,4} := X_{n,2}$

3
G.
E.

kxb:=15..15+Num_Meters

LR:=READPRN(lastrow)

Comp_{1,b}:=LR_b

cc:=2..rows(Comp)

lostsales_{kxb-14}:=if[(Gross=1),
[(Comp_{2,kxb})-(Comp_{1,kxb})],
[(Comp_{2,kxb})-(Comp_{1,kxb})]]·[1+[(60-Comp_{2,9}) cel]]]

Num_Meters

lsales:=
$$\sum_{j=1}^{lostsales_j}$$
day:=[(Comp_{2,2})·(-1)]·[(Comp_{1,2})·(-1)]lhour:=(23-Comp_{1,3})·3600lmin:=(60+Comp_{1,4})·60nhour:=Comp_{2,3}·3600nmin:=[Comp_{2,4}·(-1)]·60ltime:=if[day>0,((day-1)·86400)+lhour+lmin+nhour+nmin,if[day=0,[(Comp_{2,3}-Comp_{1,3})·3600]+lmin+nmin,-9999]]Comp_{cc,11}:=Comp_{cc,11}+Comp_{1,11}+ltimeComp_{cc,12}:=Comp_{cc,12}+Comp_{1,12}+lsales

FIG. 4

ROUTINE
OPERATION
100

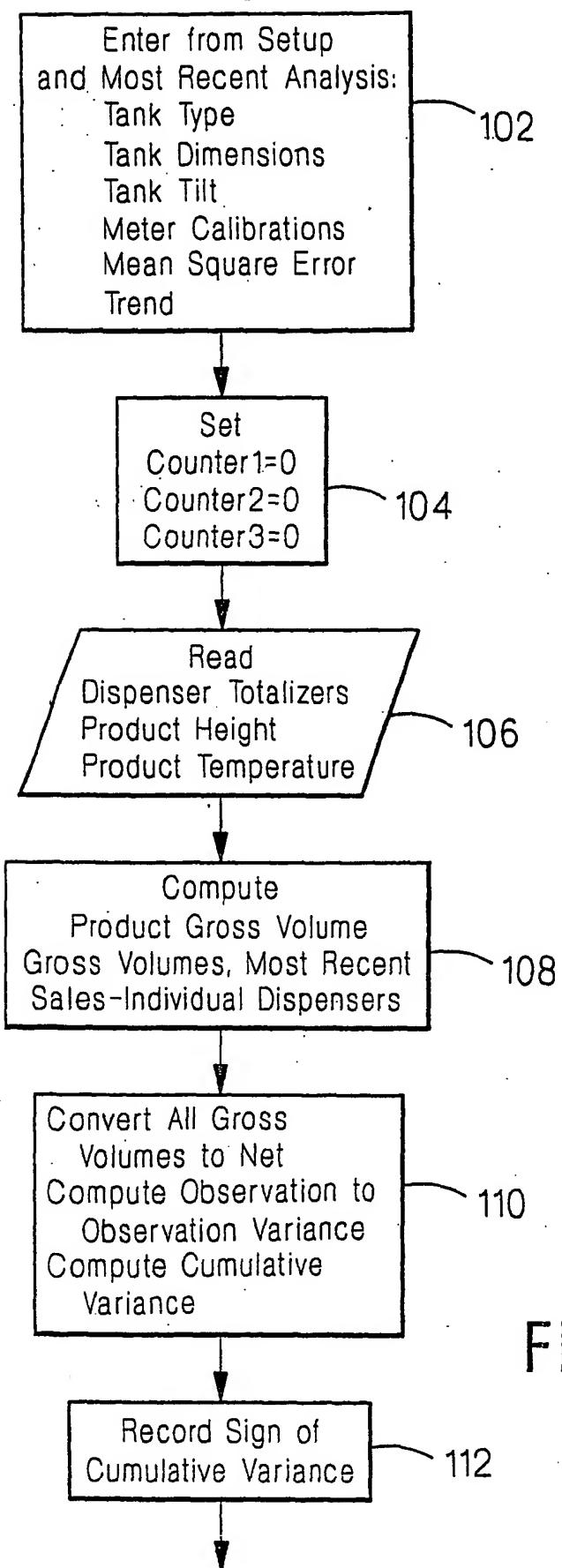


FIG. 5

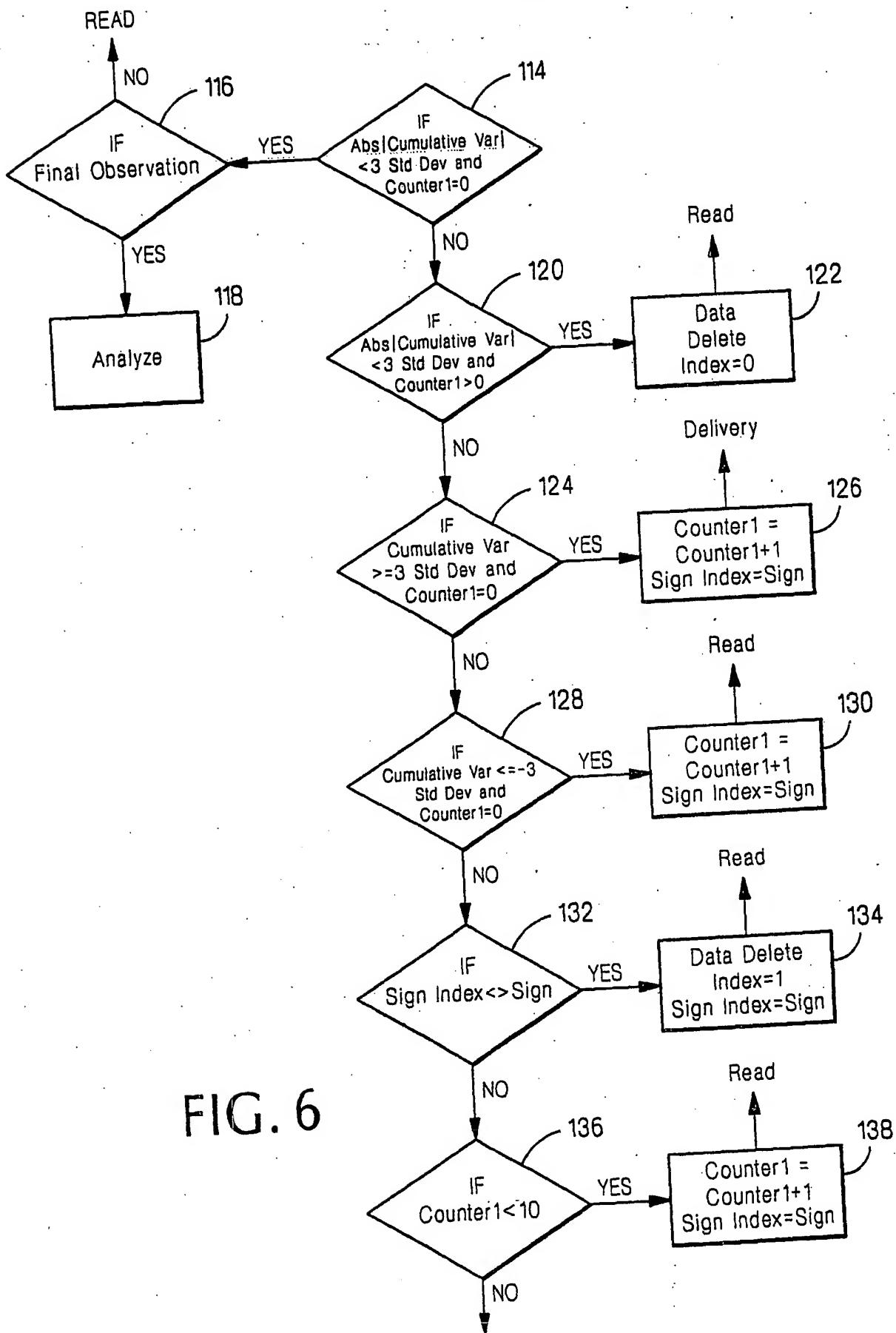


FIG. 6

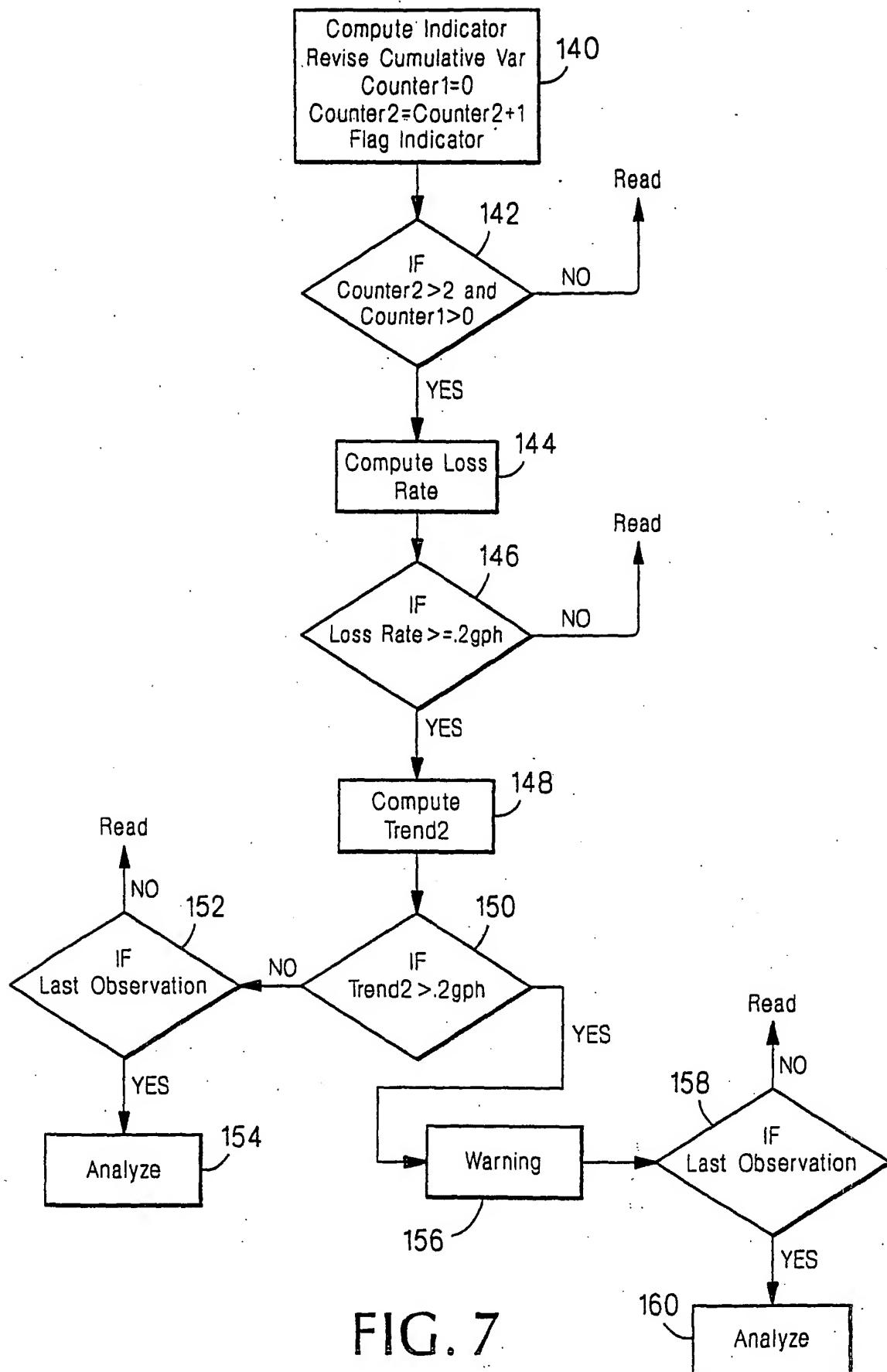


FIG. 7

DATA DELETE

170

From Main Program

172

IF
Index=0

YES

NO

Process

174

Read

IF
Abs|Cumulative Var|
< 3 Std Dev and
Counter1=5

YES

Delete Data
from Counter1=0
to Counter1=Counter3
Counter1=0
Counter3=0

NO

IF
Abs|Cumulative Var|
< 3 Std Dev

YES

Counter1=
Counter1+1

NO

IF
Sign=Sign Index

YES

Delete Data from
Counter3 to
Counter1-1
Counter1=Counter3

NO

Delete Data from
Counter1=0 to
Counter1
Counter1=1
Counter3=0
Sign Index=Sign

188

Read

180

FIG. 8

YES

Read

178

Read

182

Read

186

Read

DELIVERY CALCULATION

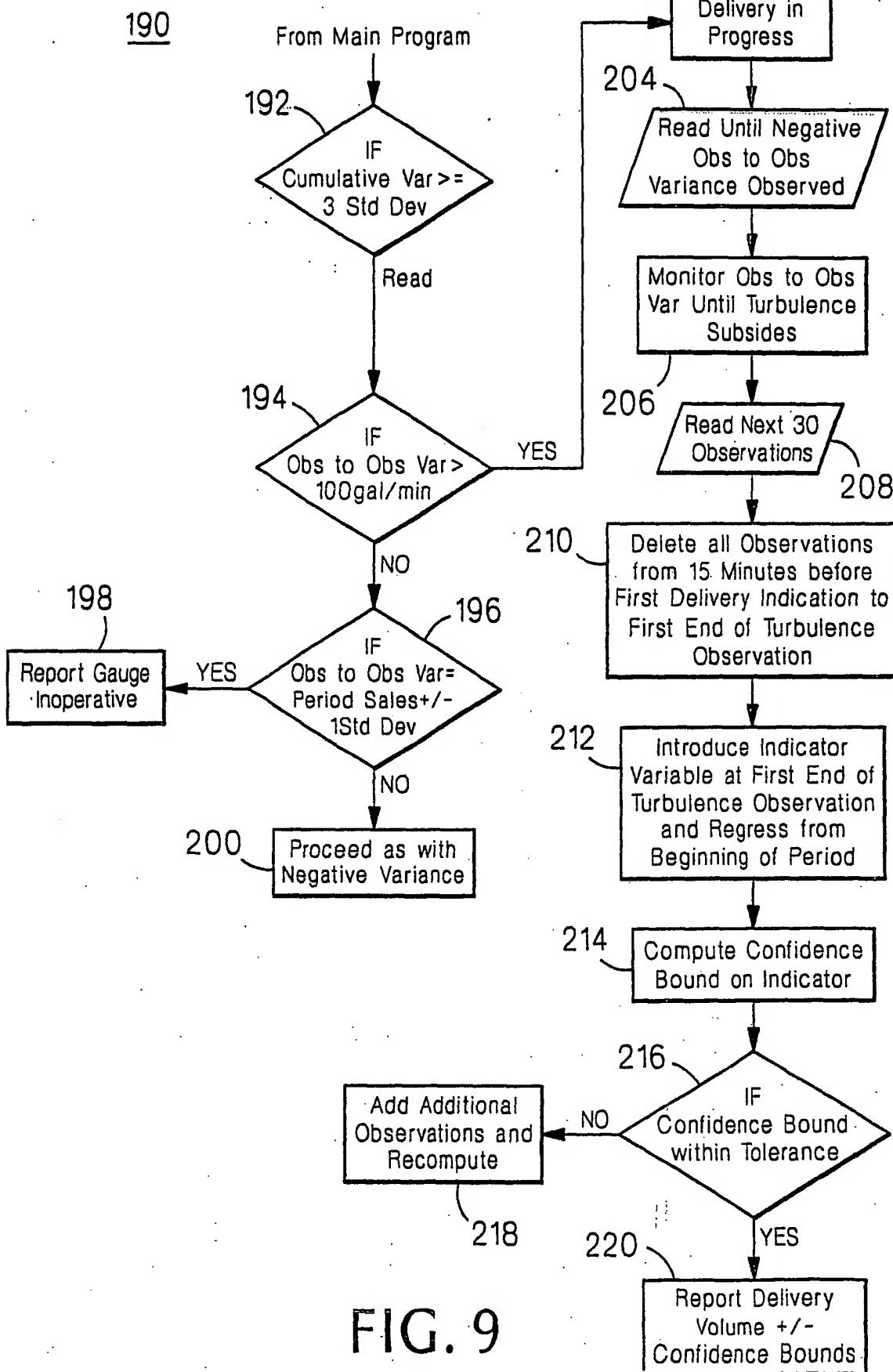


FIG. 9

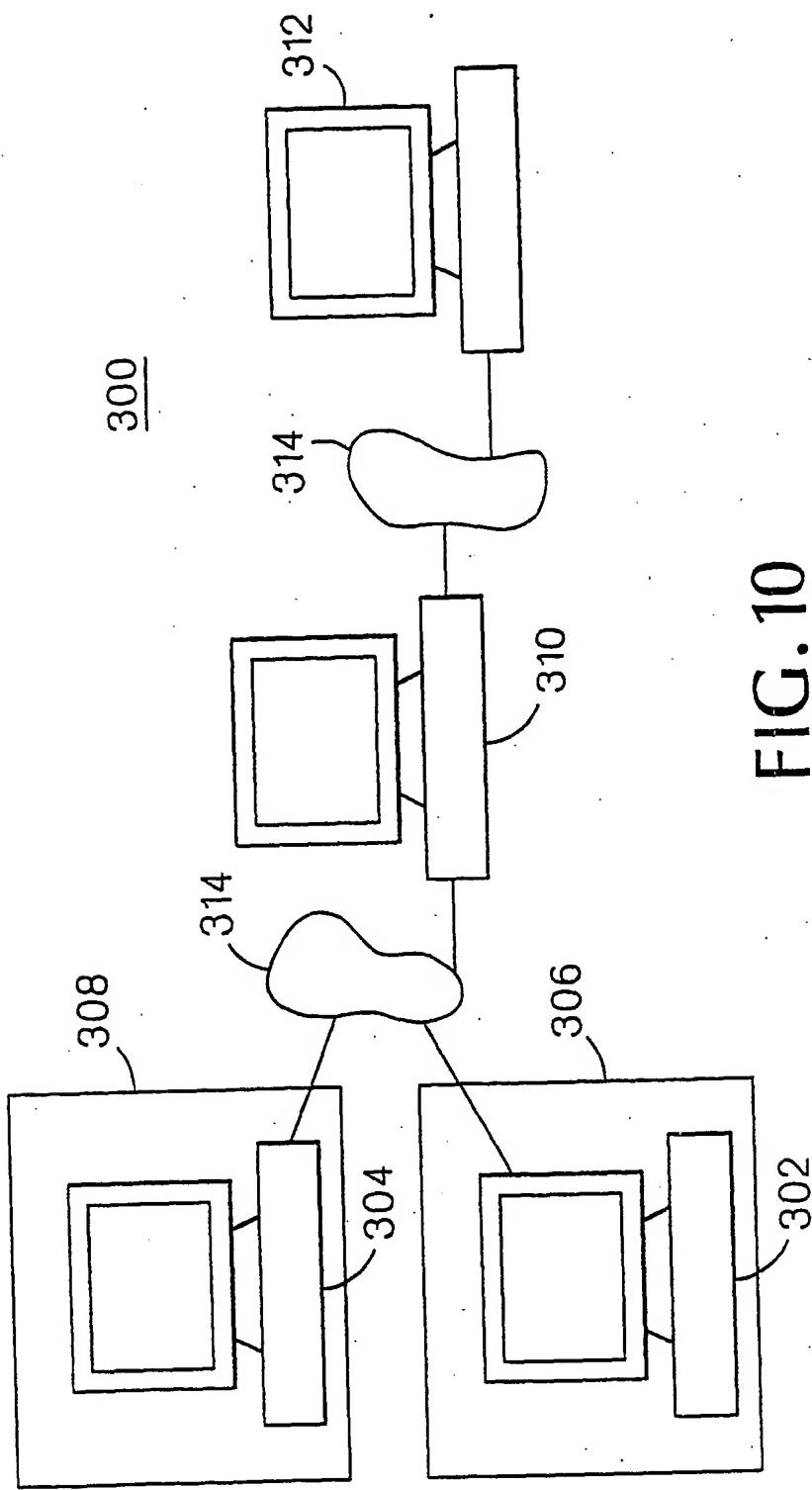


FIG. 10

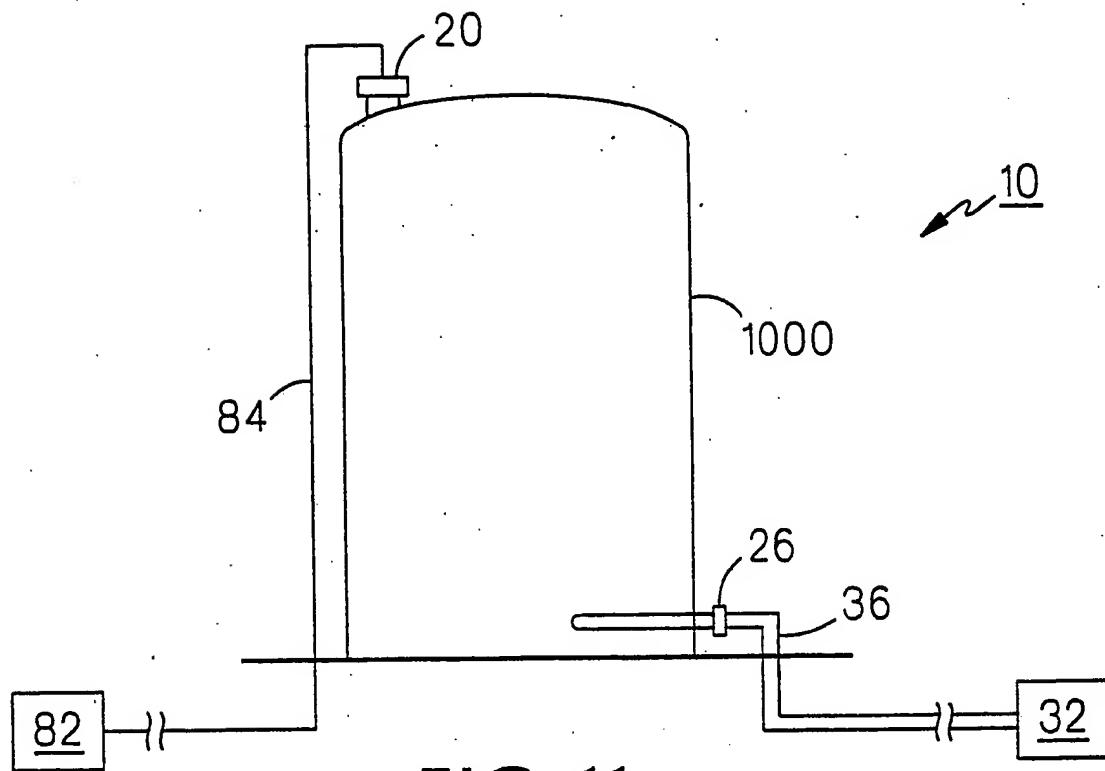


FIG. 11

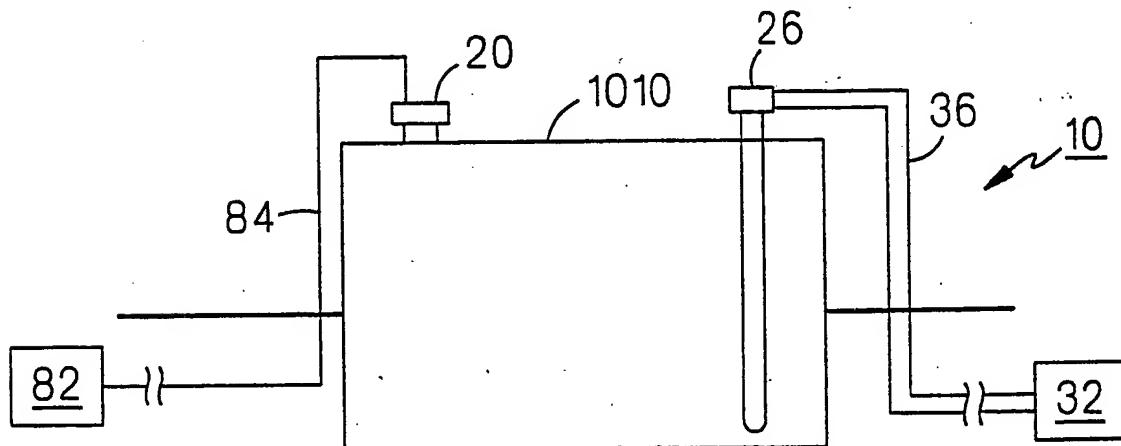


FIG. 12

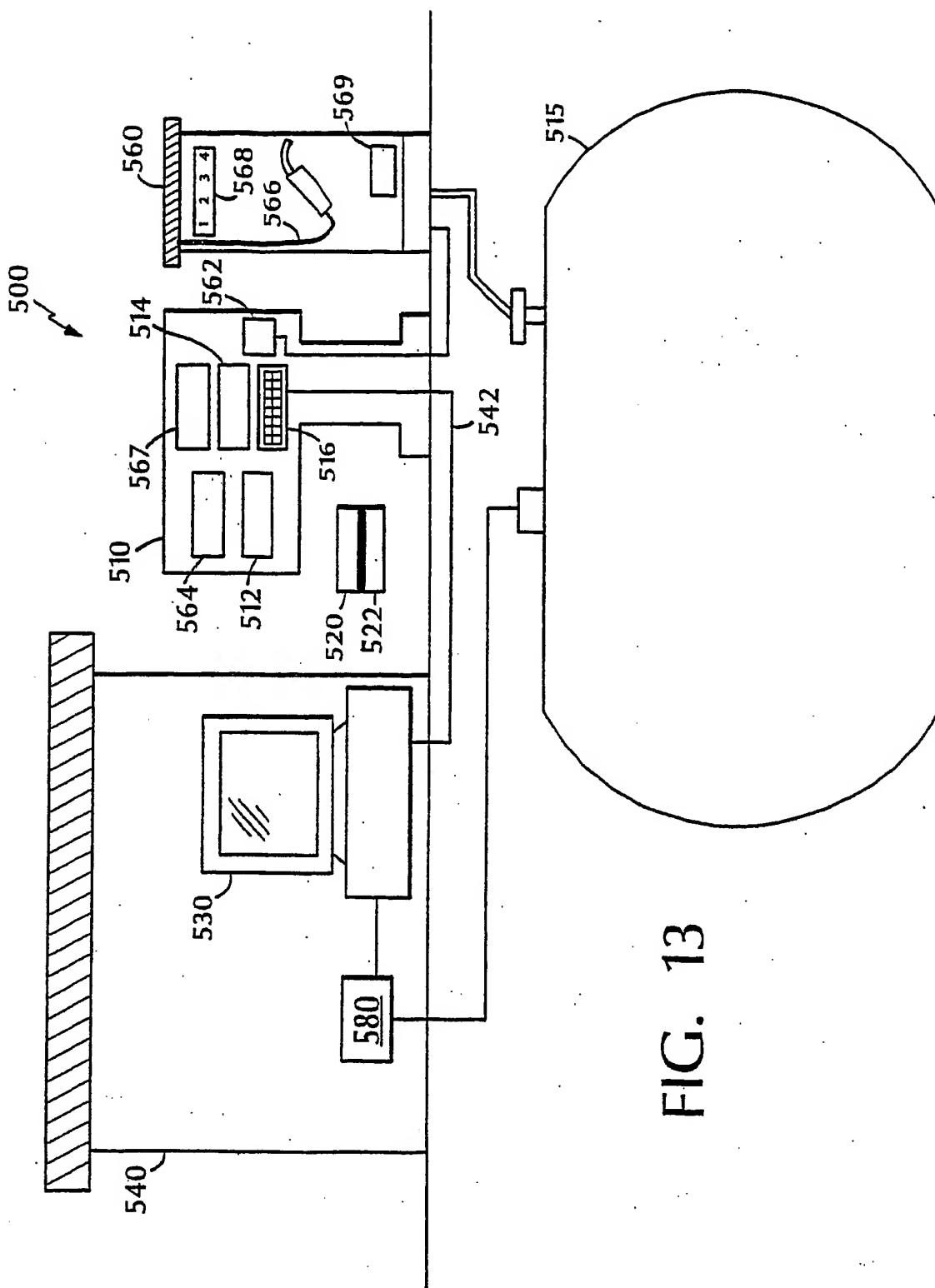


FIG. 13